

LOCATION SKETCH



DEPARTMENT OF PUBLIC WORKS

CITY OF JOHNS CREEK

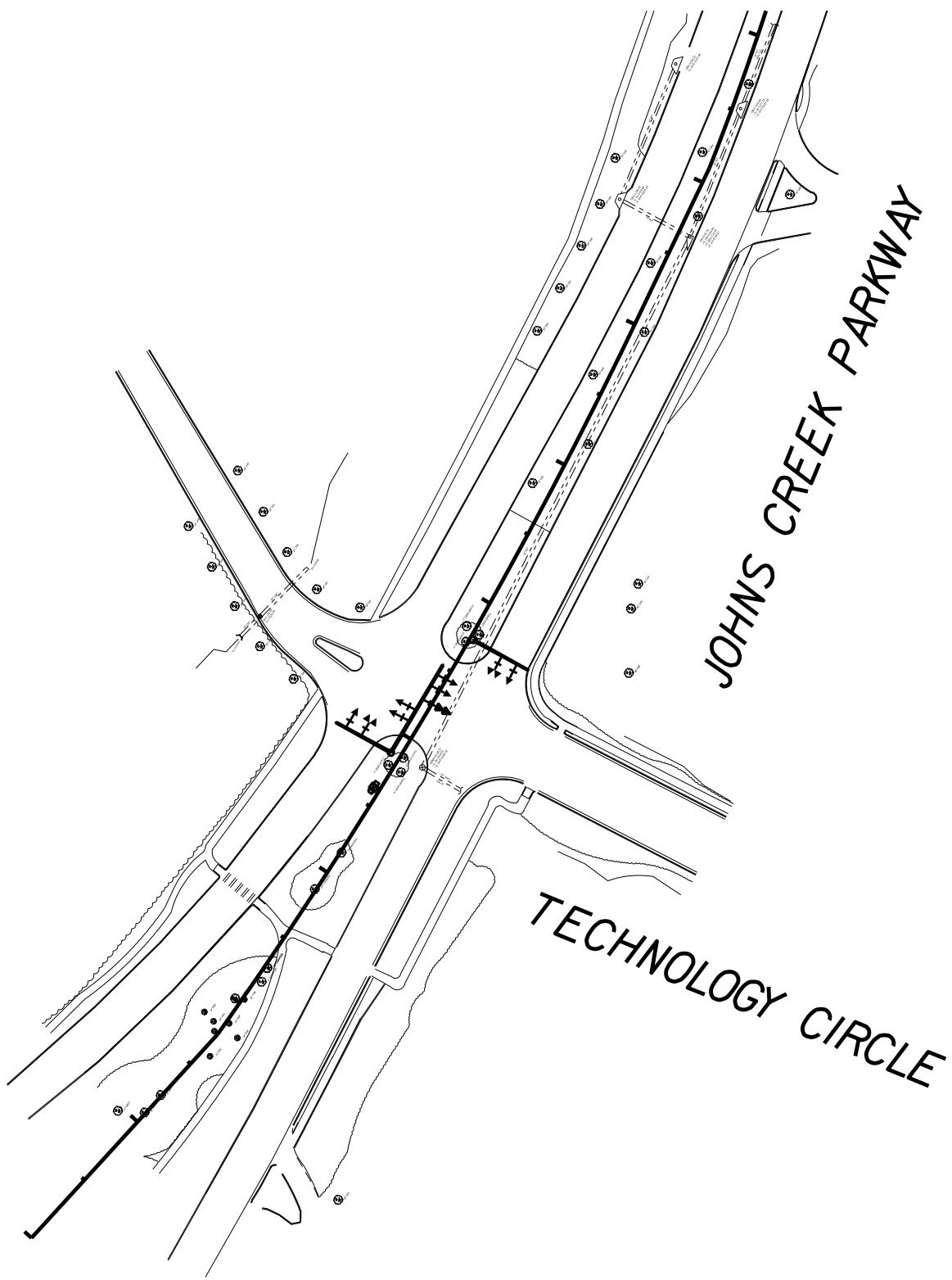
NEW CONSTRUCTION

JOHNS CREEK PARKWAY AT TECHNOLOGY CIRCLE

TRAFFIC SIGNAL DESIGN

FEDERAL ROUTE * N/A

STATE ROUTE * N/A



Kimley»Horn

Engineering, Planning, and Environmental Consultants
Suite 450, 2 Sun Court
Peachtree Corners, Georgia 30092

PREPARED BY: _____
DESIGN



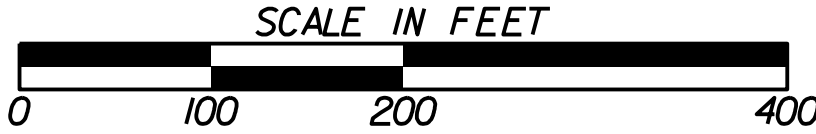
DRAFT PLANS COMPLETED	04-04-2016	
REVISIONS	05-31-2016	

THIS PROJECT HAS BEEN PREPARED USING THE HORIZONTAL GEORGIA COORDINATE SYSTEM OF 1984 (NAD 1983/94 WEST ZONE, AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

THE DATA TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

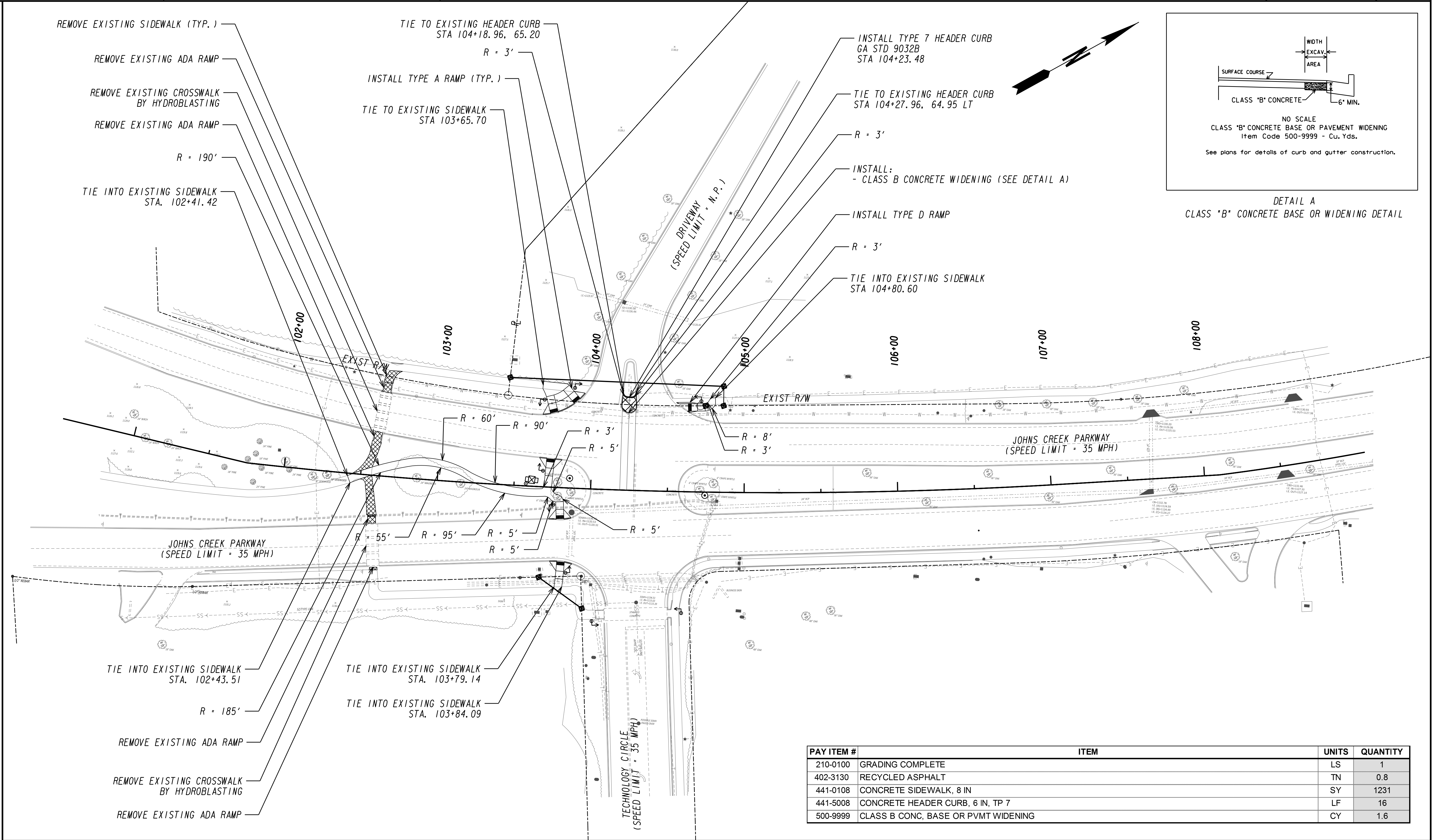


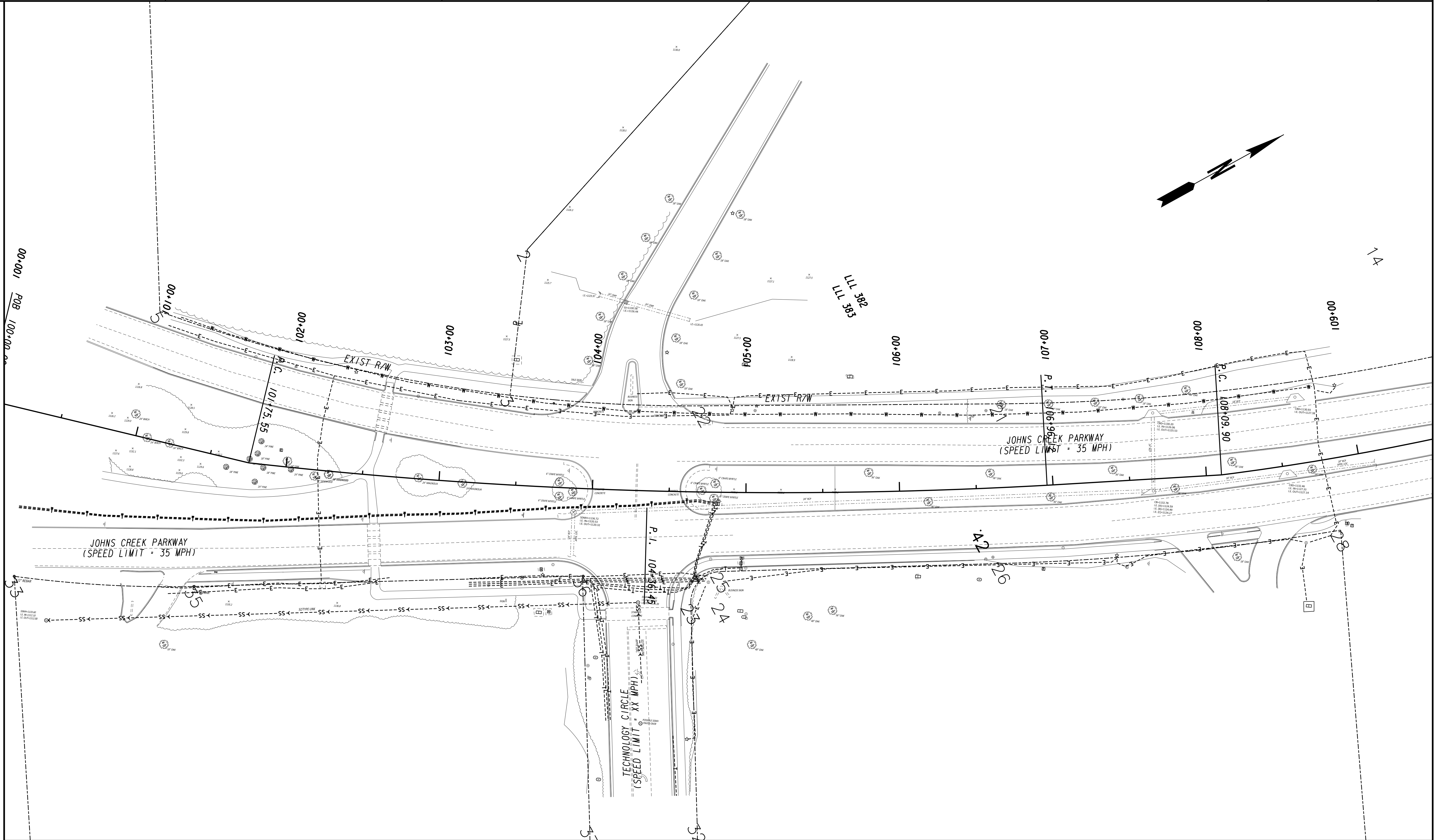
Know what's below.
Call before you dig.



DRAWING No.
01-001

8/10/2016 bing.zhang		10:56:22 AM gp1ot-v8 gp1otborder-v8i-P0.1b1		017296002_04-001.dgn									
TRAFFIC SIGNAL GENERAL NOTES						ITS GENERAL NOTES							
<p>1. ALL WORK, MATERIALS, AND EQUIPMENT SHALL CONFORM TO THE GEORGIA DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF TRANSPORTATION SYSTEMS" CURRENT EDITION AND CITY OF JOHNS CREEK SPECIFICATIONS.</p> <p>2. THE COMPLETE SIGNAL INSTALLATION SHALL CONFORM TO ALL APPROPRIATE PARTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES CURRENT EDITION.</p> <p>3. SIGNAL HEADS SHALL BE ERECTED TO PROVIDE AT LEAST 17 FEET BUT NO MORE THAN 19 FEET CLEARANCE FROM BOTTOM OF SIGNAL HEADS TO TOP OF ROAD SURFACE AND A MINIMUM OF 8 FEET MEASURED HORIZONTALLY BETWEEN CENTERS OF SIGNAL FACES.</p> <p>4. THE CONTRACTOR SHALL LOCATE UNDERGROUND UTILITIES IN VICINITY OF NEW TRAFFIC SIGNAL POLES PRIOR TO ORDERING. AT THE DISCRETION OF THE ENGINEER, MINOR SHIFTS (UP TO A MAXIMUM OF 5 FEET), IN LOCATION OF NEW SIGNAL POLES, ARE ACCEPTABLE TO AVOID UNDERGROUND UTILITIES. CONTRACTOR SHALL ENSURE THAT MINOR LOCATION SHIFTS DO NOT REQUIRE AN INCREASE IN MAST ARM LENGTH AND ARE WITHIN THE EXISTING RIGHT-OF-WAY. MINIMUM CLEARANCES FROM EDGE OF PAVEMENT SHALL BE MAINTAINED. PLACEMENT OF THE SIGNAL HEADS SHALL BE RETAINED AS SHOWN ON THE PLANS.</p> <p>5. THE CONTRACTOR SHALL MAINTAIN EXISTING TRAFFIC SIGNALS DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC SIGNAL AND/OR CONTROL SYSTEM ADJUSTMENTS, INCLUDING TEMPORARY SUPPORT POLE LOCATIONS(S) REQUIRED BY THE PROJECT DURING THE INTERIM PERIOD THROUGH INSTALLATION OF NEW SIGNAL EQUIPMENT. AT NO TIME SHALL THE CONTRACTOR CAUSE ANY PART OF THE SIGNAL OPERATION TO BE INOPERABLE.</p> <p>6. INSTALLATION IS TO BE CHECKED AND ACCEPTED BY THE CITY OF JOHNS CREEK PRIOR TO FINAL ACCEPTANCE.</p> <p>7. THE COST OF REMOVAL OF EXISTING EQUIPMENT SHALL BE INCIDENTAL TO THE COST OF PROJECT. WHEN REMOVED, EXISTING EQUIPMENT SHALL BE DELIVERED AND UNLOADED BY THE CONTRACTOR TO THE CITY OF JOHNS CREEK SIGNAL SHOP.</p> <p>8. FOR STRAIN POLE FOUNDATION SIZE AND REINFORCEMENT, SEE STRAIN POLE AND MAST ARM POLE FOUNDATION SHEET.</p> <p>9. MATERIAL CERTIFICATION IS REQUIRED PRIOR TO BEGINNING ANY SIGNAL INSTALLATION WORK. THE CONTRACTOR SHALL FOLLOW PROCEDURES OUTLINED IN THE GDOT SPECIFICATION AND PER CITY OF JOHNS CREEK REQUIREMENTS.</p> <p>10. THE CONTRACTOR SHALL REPLACE IN KIND AND SIZE, AT NO SEPARATE EXPENSE TO THE CITY, ANY BARRIER WALL, FENCE, DITCH PAVING, CURBING, SIDEWALK, GUTTER, SLOPE PAVEMENT, SIGNS, GUARDRAILS, LANDSCAPING, GRASSINGS, UTILITY SERVICE LINES, STORM DRAIN PIPES, MASONRY WALLS AND PAVING THAT IS REMOVED, DAMAGED OR DESTROYED, DUE TO CONTRACTOR'S ACTIVITY.</p> <p>11. ALL TRAFFIC MARKING, SYMBOLS OR STRIPING TO BE REMOVED AND/OR REPLACED SHALL BE PAID FOR IN THE TRAFFIC CONTROL LUMP SUM ITEM.</p> <p>12. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH MODIFYING EXISTING AND ESTABLISHING NEW POWER AND COMMUNICATIONS SERVICES FOR TRAFFIC SIGNAL, VIDEO DETECTION SYSTEMS AND/OR CCTV CAMERAS ON THIS PROJECT. IF A UTILITY TRANSFORMER IS REQUIRED FOR TRAFFIC SIGNAL EQUIPMENT, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INCLUDE AS PART OF THEIR BID PRICE, FOR THAT TRAFFIC SIGNAL INSTALLATION IF THE RESPECTIVE UTILITY REQUIRES PAYMENT FOR INSTALLATION.</p>						<p>13. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL MONTHLY POWER AND COMMUNICATION SERVICE TO THE TRAFFIC SIGNAL INSTALLATION AND SUPPORT DEVICES, UNTIL THE NEW TRAFFIC SIGNAL INSTALLATION HAS SATISFACTORILY COMPLETED A TEST PERIOD OF UNINTERRUPTED OPERATION, FOR 30 DAYS. UPON COMPLETION OF THE TEST PERIOD, THE CONTRACTOR WILL COMPLETE A TRANSFER OF UTILITY COST TO THE CITY OF JOHNS CREEK.</p> <p>14. PULLBOXES INSTALLED IN SIDEWALK SHALL BE FLUSH WITH SIDEWALK.</p> <p>15. ALL EXISTING, NON-JOINT USE SIGNAL POLES THAT ARE NOT SHOWN AS BEING MAINTAINED IN PROPOSED SIGNAL LAYOUTS SHALL BE REMOVED. ALL EXISTING SIGNAL HEADS AND CABINET EQUIPMENT SHALL BE REMOVED.</p> <p>16. MAST ARMS AND STRAIN POLES SHALL BE PAINTED PER CITY OF JOHNS CREEK SPECIFICATIONS (ANTIQUE BRONZE).</p> <p>17. INSTALL (4) EA. 3" NONMETAL CONDUIT AND (2) EA. 1" NONMETAL CONDUIT BETWEEN THE CONTROL CABINET AND ITS ADJACENT PULLBOX. INSTALL (3) EA. 2" NONMETAL CONDUIT AND (2) EA. 1" NONMETAL CONDUIT BETWEEN EACH STEEL STRAIN POLE (WITH OR WITHOUT MAST ARM) AND ITS ADJACENT PULLBOX. INSTALL (2) EA. 2" NONMETAL CONDUIT AND (1) EA. 1" NONMETAL CONDUIT BETWEEN PEDESTAL POLE AND ITS ADJACENT PULLBOX.</p> <p>18. ALL CONCRETE TESTING IS TO BE DONE BY THE CONTRACTOR WITH A 7, 14, AND 28 DAY BREAK. ALL RESULTS WILL BE TURNED OVER TO THE CITY. POLES CAN BE MOUNTED AFTER 7 DAYS OF HARDENING. ARMS MAY BE INSTALLED WHEN PSI IS GREATER THAN 3000.</p>				<p>1. ALL WORK, MATERIALS, AND EQUIPMENT SHALL CONFORM TO THE GEORGIA DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF TRANSPORTATION SYSTEMS" CURRENT EDITION AND CITY OF JOHNS CREEK SPECIFICATIONS.</p> <p>2. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND TEMPORARY CONSTRUCTION EASEMENTS FROM THE CITY PRIOR TO START OF CONSTRUCTION.</p> <p>3. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY CONDITIONS PRIOR TO ANY CONSTRUCTION. DAMAGE TO EXISTING UTILITIES RESULTING FROM CONTRACTOR NEGLIGENCE SHALL BE REPAIRED AT CONTRACTORS EXPENSE.</p> <p>4. THE CONTRACTOR SHALL ADHERE TO THE CALL BEFORE YOU DIG LAW BY CALLING THE UNDERGROUND PROTECTION CENTER AT GEORGIA811 BEFORE BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO PROVIDE APPROPRIATE CLEARANCES FROM UTILITIES.</p> <p>5. WITHIN 24 HOURS, THE CONTRACTOR SHALL REPAIR ANY EXISTING CONDUIT, CABLE, OR PIPE, THAT IS DAMAGED BY ANY WORK PERFORMED AS PART OF THIS PROJECT AT NO ADDITIONAL COST.</p> <p>6. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE TO DISTRICT AND CITY A COMPLETE AND WORKING FIBER OPTIC SIGNAL AND ITS INTERCONNECT SYSTEM, INCLUDING BOTH DATA AND VIDEO NETWORK TRAFFIC. ALL REQUIRED FIBER OPTIC AND ETHERNET DEVICES, EQUIPMENT, OR INCIDENTALS NOT SHOWN AS DIRECT PAY ITEMS, BUT RECOMMENDED BY THE FIBER MANUFACTURER OR SUPPLIER, SHALL BE COST ABSORBED. TESTING, BURN-IN, AND ACCEPTANCE OF THE FIBER OPTIC SYSTEM, AND ALL OTHER ITS COMPONENTS SHALL CONFORM AND BE PROVIDED AS SPECIFIED BY THE CURRENT EDITION OF GDOT SPECIFICATIONS.</p> <p>7. WHERE EXISTING WIRE, CABLE, OR EQUIPMENT IS BEING REPLACED OR DISTURBED, ALL PREPARATORY WORK SHALL BE COMPLETED BEFORE REPLACEMENT OR DISTURBANCE IS MADE. NO EQUIPMENT SHALL BE DISCONNECTED UNTIL PROPER REPLACEMENTS ARE AVAILABLE AND ALL NECESSARY PREPARATIONS HAVE BEEN MADE. THE COMMUNICATIONS SHALL NOT BE DOWN FOR MORE THAN 24 HOURS.</p> <p>8. PRIOR TO ORDERING ANY CABLES, THE CONTRACTOR SHALL VERIFY ON SITE THE LENGTH OF EACH CABLE THAT IS REQUIRED, TAKING ALL NECESSARY MEASUREMENT.</p> <p>9. DETECTABLE MARKING TAPE SHALL BE FURNISHED AND INSTALLED WITH ALL CONDUIT. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE COST OF THE ASSOCIATED CONDUIT.</p> <p>10. ALL FIBER JUMPERS ARE INCIDENTAL TO THE SWITCHES AND FDC.</p> <p>11. ALL SPLICES OF FIBER OPTIC CABLE UNDER THIS CONTRACT SHALL BE FUSION SPLICES, UNLESS OTHERWISE SPECIFICALLY NOTED IN EACH INSTANCE OR DIRECTED BY THE TRAFFIC OPERATIONS ITS MANAGER. NO IN-LINE SPLICES SHALL BE MADE IN ANY CABLE.</p> <p>12. TESTING FOR ITEMS COVERED UNDER THE 935, 936, & 939 SPECIFICATIONS ARE INCLUDED IN THE COST OF THE ITEM.</p>			
				<div>Kimley»Horn</div> <div>Engineering, Planning, and Environmental Consultants Suite 450, 2 Sun Court Peachtree Corners, Georgia 30092</div>		REVISION DATES		GENERAL NOTES					
						CHECKED: DATE:		DRAWING No.					
						BACKCHECKED: DATE:		04-001					
						CORRECTED: DATE:							
						VERIFIED: DATE:							





SIGNAL LEGEND

PROPOSED 3-SEC SIGNAL HEAD

EXISTING 4-SEC SIGNAL HEAD

PROPOSED 5-SEC SIGNAL HEAD

RELOCATED 3-SEC SIGNAL HEAD

PEDESTRIAN SIGNAL HEAD

DETECTION LEGEND

PROPOSED VIRTUAL DETECTION ZONE

PROPOSED INDUCTIVE LOOP

PROPOSED VIDEO DETECTION CAMERA

PROPOSED MAGNETOMETER

PROPOSED RADAR

Kimley»Horn

Engineering, Planning, and Environmental Consultants
Suite 450, 2 Sun Court
Peachtree Corners, Georgia 30092

SCALE IN FEET

REVISION DATES		

SIGNAL PLANS

EXISTING CONDITIONS

JOHNS CREEK PARKWAY AT TECHNOLOGY CIRCLE

CHECKED:	DATE:
BACKCHECKED:	DATE:
CORRECTED:	DATE:
VERIFIED:	DATE:

DRAWING No.
27-000

7/31/2015

GPLN

LIST OF MATERIALS FOR TRAFFIC SIGNAL INSTALLATION

LOCATION: JOHNS CREEK PARKWAY AT TECHNOLOGY CIRCLE SIGNAL DESIGN

DEPARTMENT OF PUBLIC WORKS
CITY OF JOHNS CREEK
★FOR INFORMATIONAL PURPOSES ONLY★

MATERIALS

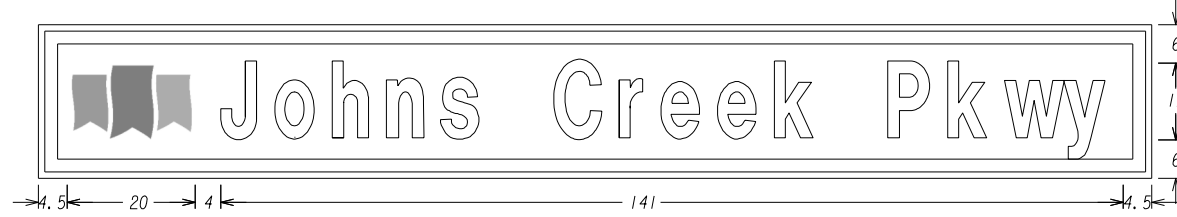
ITEM	UNITS	QUANTITY
CONTROLLER CABINET ASSEMBLY		
ECONOLITE COBALT C CONTROLLER	EA	1
SAFETRAN HYBRID CABINET	EA	1
SWITCH PACK	EA	14
DC ISOLATOR	EA	3
2010 CONFLICT MONITOR, EXTENDED FEATURES, ETHERNET	EA	1
SURGE PROTECTOR	EA	1
POWER METER & DISCONNECT UNIT	EA	1
UNINTERRUPTIBLE POWER SYSTEM (PER CITY OF JOHNS CREEK SECTION 925JC SPECIAL PROVISION)	EA	1
332A PREFABRICATED CONTROLLER CABINET BASE	EA	1
LOOP/PED LEAD-IN WIRE (3 PAIR SHIELDED, TWISTED/1000 FT)	REEL	1
SIGNAL CABLE (14 AWG) - 7 CONDUCTOR	REEL	2
ONE-WAY, 3-SECTION (R,Y,G), 12" INCANDESCENT LOOK LED SIGNAL HEAD, PLASTIC	EA	6
ONE-WAY, 4-SECTION (Ra,Ya,FYa,Ga), 12" INCANDESCENT LOOK LED SIGNAL HEAD, PLASTIC	EA	1
ONE WAY, 5-SECTION (R, Y, Ya, FYa, G, Ga), BIMODAL, 12" INCANDESCENT LOOK LED SIGNAL HEAD, PLASTIC	EA	2
REFLECTIVE BACKPLATE FOR ONE-WAY, 3-SECTION, 12" SIGNAL HEAD	EA	6
REFLECTIVE BACKPLATE FOR ONE-WAY, 4-SECTION, 12" SIGNAL HEAD	EA	1
REFLECTIVE BACKPLATE FOR ONE-WAY, 5-SECTION, BIMODAL, 12" SIGNAL HEAD	EA	2
ONE-WAY, 1-SECTION, 18" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, FULL HAND/MAN OVERLAP	EA	8
PEDESTRIAN PUSH BUTTON STATION, w/ BUTTON, SIGN, AND ADAPTER FOR SIGN	EA	8
HARDWARE FOR MAST ARM MOUNTING	EA	9
HARDWARE FOR PEDESTAL POLE, TOP POST MOUNTING, ONE-WAY BRACKET ASSEMBLY	EA	8
PEDESTAL POLE, 5 FT, COMPLETE w/ BASE	EA	1
PEDESTAL POLE, 10 FT, COMPLETE w/ BASE	EA	8
PULLBOX, PB-3	EA	8
R10-5A, LEFT TURN ON FLASHING YELLOW ARROW SIGN	EA	3
MISC MATL TO COMPLETE INSTALLATION	LUMP	-

NOTE:

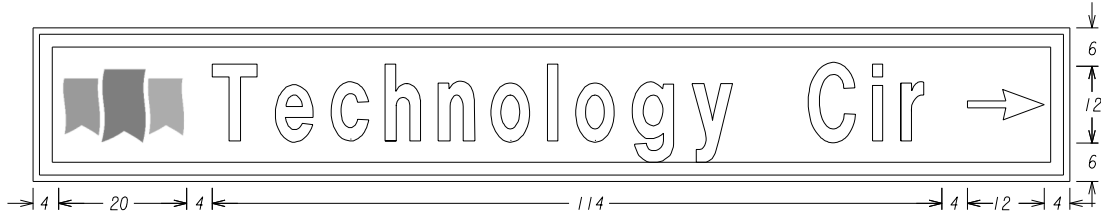
1. CONTRACTOR TO COORDINATE WITH HYBRID CABINET VENDOR TO DETERMINE DETECTION INPUT ASSIGNMENTS

PAY ITEMS

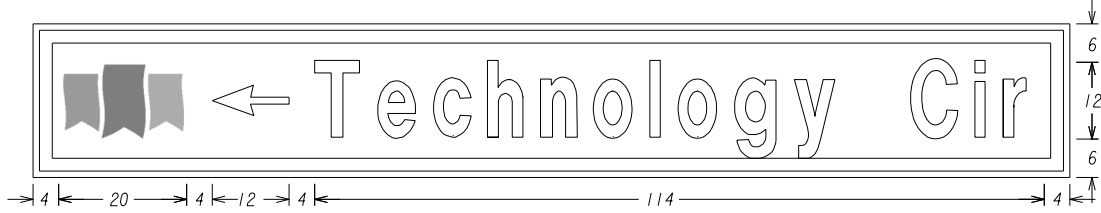
PAY ITEM #	ITEM	UNITS	QUANTITY
150-1000	TRAFFIC CONTROL -	LUMP	-
634-1200	RIGHT OF WAY MARKERS	EA	6
636-1033	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	SF	5
636-1036	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 11	SF	27
636-1045	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 11	SF	112
636-2070	GALVANIZED STEEL POSTS, TP 7	LF	13
636-2080	GALVANIZED STEEL POSTS, TP 8	LF	43
639-3004	STEEL STRAIN POLE, TYPE IV, WITH 40' MAST ARM	EA	1
639-3004	STEEL STRAIN POLE, TYPE IV, WITH DUAL 40' AND 65' MAST ARMS	EA	1
647-1000	TRAFFIC SIGNAL INSTALLATION	LUMP	1
647-2150	PULLBOX, PB-4	EA	1
653-1704	THERMOPLASTIC SOLID TRAFFIC STRIPE, 24 IN, WHITE	LF	75
653-1804	THERMOPLASTIC SOLID TRAFFIC STRIPE, 8 IN, WHITE	LF	625
682-6222	CONDUIT, NONMETAL, TYPE 2, 2 IN	LF	10
682-6233	CONDUIT, NONMETAL, TYPE 3, 2 IN	LF	1500
682-9950	DIRECTIONAL BORE, 7 IN	LF	500
937-1000	VIDEO CAMERA SENSOR ASSEMBLY - ITERIS	EA	4
937-8010	TESTING - VIDEO DETECTION SYSTEM	LUMP	-
937-8510	TRAINING - VIDEO DETECTION SYSTEM	LUMP	-



D3-1 (#1)
174"X24"
WHITE ON GREEN
2 REQUIRED
12" SER C



D3-1 (#2)
162"X24"
WHITE ON GREEN
1 REQUIRED
12" SER C



D3-1 (#3)
162"X24'
WHITE ON GREEN
1 REQUIRED
12" SER C

Kimley»Horn

Engineering, Planning, and Environmental Consultants
Suite 450, 2 Sun Court
Peachtree Corners, Georgia 30092

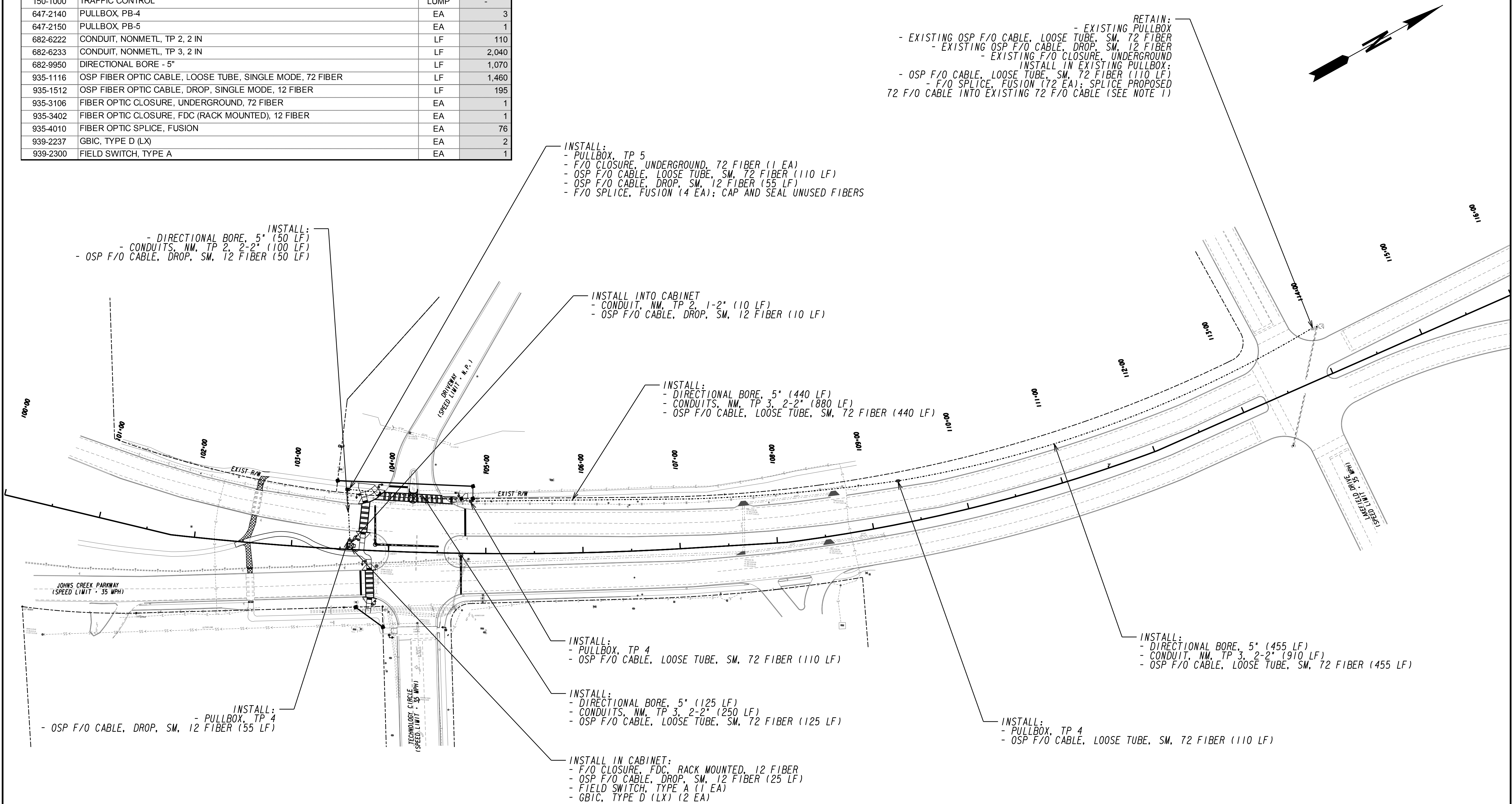
REVISION DATES

SIGNAL PLANS

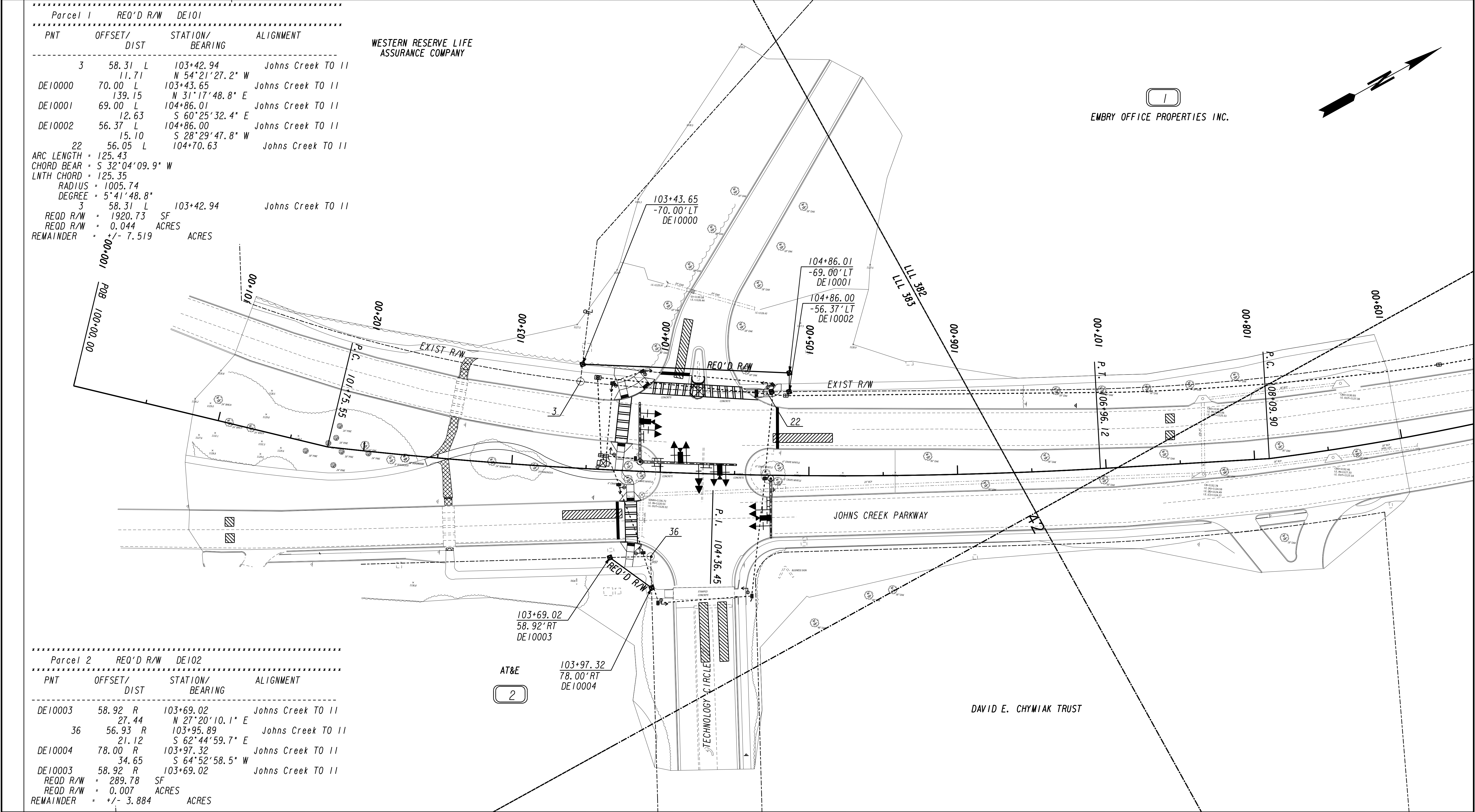
JOHNS CREEK PARKWAY AT TECHNOLOGY CIRCLE

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		27-002
CORRECTED:		DATE:		
VERIFIED:		DATE:		

PAY ITEM #	ITEM	UNITS	TOTAL QUANTITY
150-1000	TRAFFIC CONTROL	LUMP	-
647-2140	PULLBOX, PB-4	EA	3
647-2150	PULLBOX, PB-5	EA	1
682-6222	CONDUIT, NONMETL, TP 2, 2 IN	LF	110
682-6233	CONDUIT, NONMETL, TP 3, 2 IN	LF	2,040
682-9950	DIRECTIONAL BORE - 5"	LF	1,070
935-1116	OSP FIBER OPTIC CABLE, LOOSE TUBE, SINGLE MODE, 72 FIBER	LF	1,460
935-1512	OSP FIBER OPTIC CABLE, DROP, SINGLE MODE, 12 FIBER	LF	195
935-3106	FIBER OPTIC CLOSURE, UNDERGROUND, 72 FIBER	EA	1
935-3402	FIBER OPTIC CLOSURE, FDC (RACK MOUNTED), 12 FIBER	EA	1
935-4010	FIBER OPTIC SPLICE, FUSION	EA	76
939-2237	GBIC, TYPE D (LX)	EA	2
939-2300	FIELD SWITCH, TYPE A	EA	1



NOTE:
1. COORDINATE WITH CITY OF JOHNS CREEK FOR SPLICING INSTRUCTIONS.



PROPERTY AND EXISTING R/W LINE

REQUIRED R/W LINE

CONSTRUCTION LIMITS

EASEMENT FOR CONSTR

& MAINTENANCE OF SLOPES

EASEMENT FOR CONSTR OF SLOPES

EASEMENT FOR CONSTR OF DRIVES

-----E-----

-----F-----

-----C-----

-----F-----

-----C-----

-----F-----

00000000

00000000

00000000

00000000

00000000

00000000

BEGIN LIMIT OF ACCESS.....BLA

END LIMIT OF ACCESS.....ELA

LIMIT OF ACCESS

REQ'D R/W & LIMIT OF ACCESS

SCALE IN FEET

0 30 60 120

Kimley»Horn

Engineering, Planning, and Environmental Consultants

877 N. Peachtree Street NW, Suite 400

Atlanta, GA 30308

DATE	REVISIONS	DATE	REVISIONS

STATE OF GEORGIA

DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY MAP

PROJECT NO: N/A

COUNTY: FULTON

LAND LOT NO: 383

LAND DISTRICT: 11

DATE 03/30/16 SH 1 OF 1